



# Recent Fuel Price Trends & Market Developments

## Petroleum Market Advisory Committee Meeting

California Energy Commission

Sacramento, California

February 8, 2016

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# Snapshot - Retail Prices Continue Declining

- CA retail gasoline prices are slowly dropping
- California
  - **Down** 33.8 cents per gallon (cpg) since last month and **down** 6.7 cpg since last week
  - 0.7 cpg **higher** than same time last year
- Washington
  - **Down** 34.9 cpg since last month and **down** 6.8 cpg since last week
  - 6.1 cpg **lower** than same time last year

## National Average Prices

Prices updated as of 2/5/2016 5:15am

	Regular	Mid	Premium	Diesel
Current Avg.	\$1.763	\$2.048	\$2.281	\$2.030
Yesterday Avg.	\$1.773	\$2.057	\$2.288	\$2.036
Week Ago Avg.	\$1.813	\$2.098	\$2.331	\$2.059
Month Ago Avg.	\$1.993	\$2.271	\$2.502	\$2.240
Year Ago Avg.	\$2.151	\$2.349	\$2.531	\$2.802

## California Average Prices

Prices updated as of 2/5/2016 5:15am

	Regular	Mid	Premium	Diesel
Current Avg.	\$2.534	\$2.675	\$2.769	\$2.412
Yesterday Avg.	\$2.545	\$2.688	\$2.782	\$2.424
Week Ago Avg.	\$2.601	\$2.740	\$2.839	\$2.461
Month Ago Avg.	\$2.872	\$3.001	\$3.103	\$2.647
Year Ago Avg.	\$2.527	\$2.624	\$2.721	\$2.984

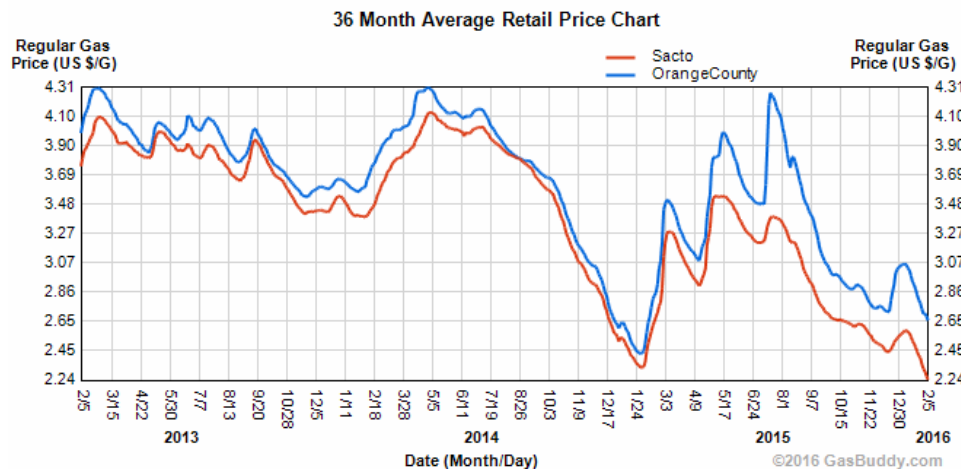
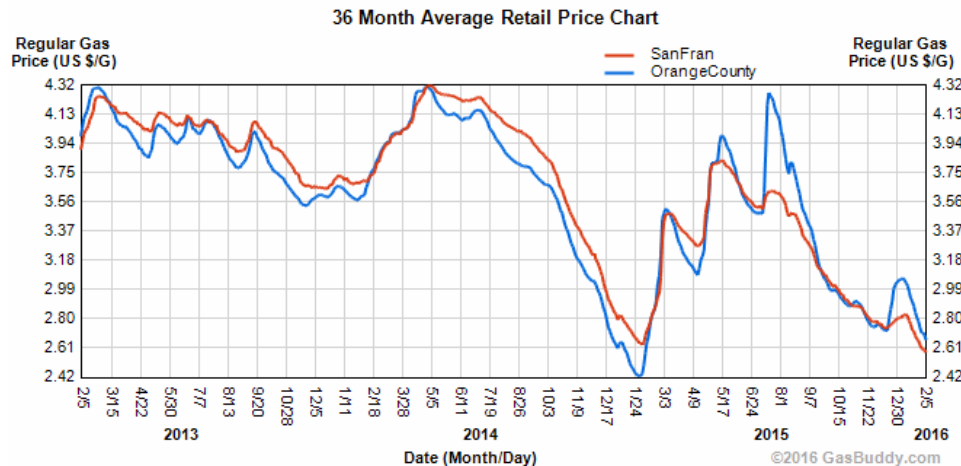
## Washington Average Prices

Prices updated as of 2/5/2016 5:15am

	Regular	Mid	Premium	Diesel
Current Avg.	\$2.113	\$2.307	\$2.417	\$2.261
Yesterday Avg.	\$2.127	\$2.323	\$2.434	\$2.266
Week Ago Avg.	\$2.181	\$2.375	\$2.495	\$2.303
Month Ago Avg.	\$2.462	\$2.621	\$2.735	\$2.543
Year Ago Avg.	\$2.174	\$2.295	\$2.399	\$2.779



# California Retail Gasoline Regional Comparisons

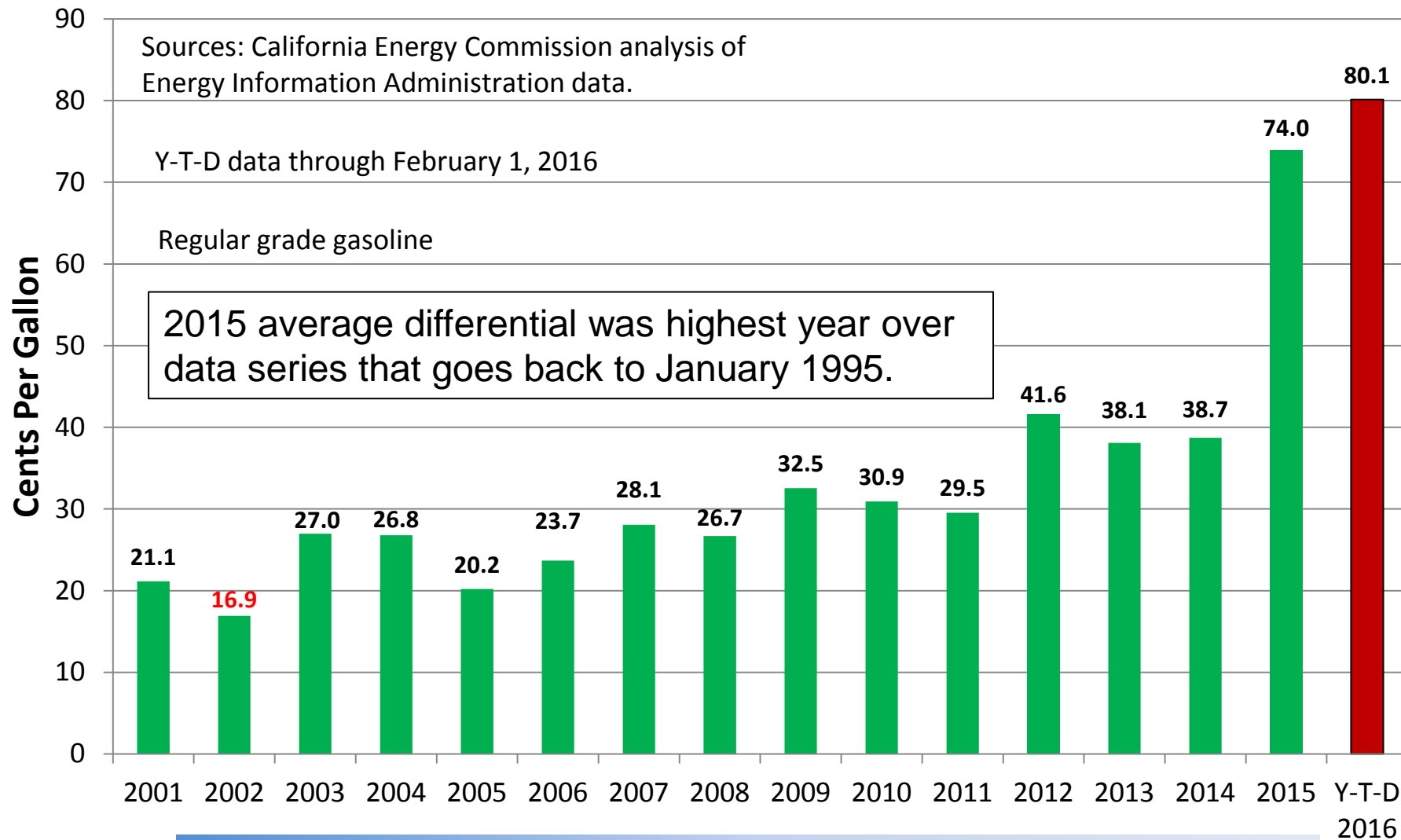


- Southern California price premium relative to Northern California persists due to continued non-operation of ExxonMobil's gasoline producing process units at Torrance
- San Francisco retail gasoline now less expensive than Orange County compared to a normally higher position
- Prices through 2/5/2016

Source: GasBuddy.com – customize chart tools.



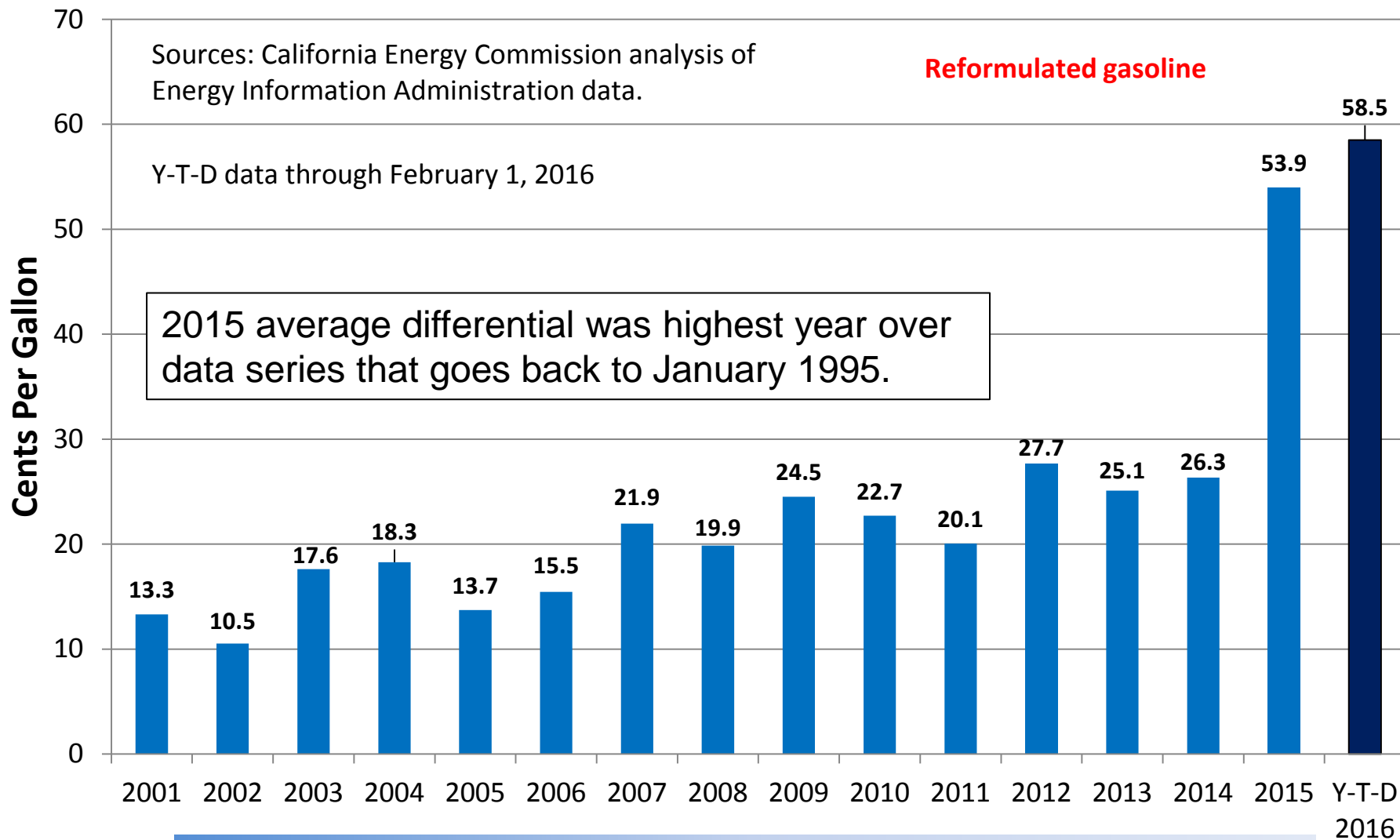
# Retail Gasoline Price Differences California Less U.S. Average





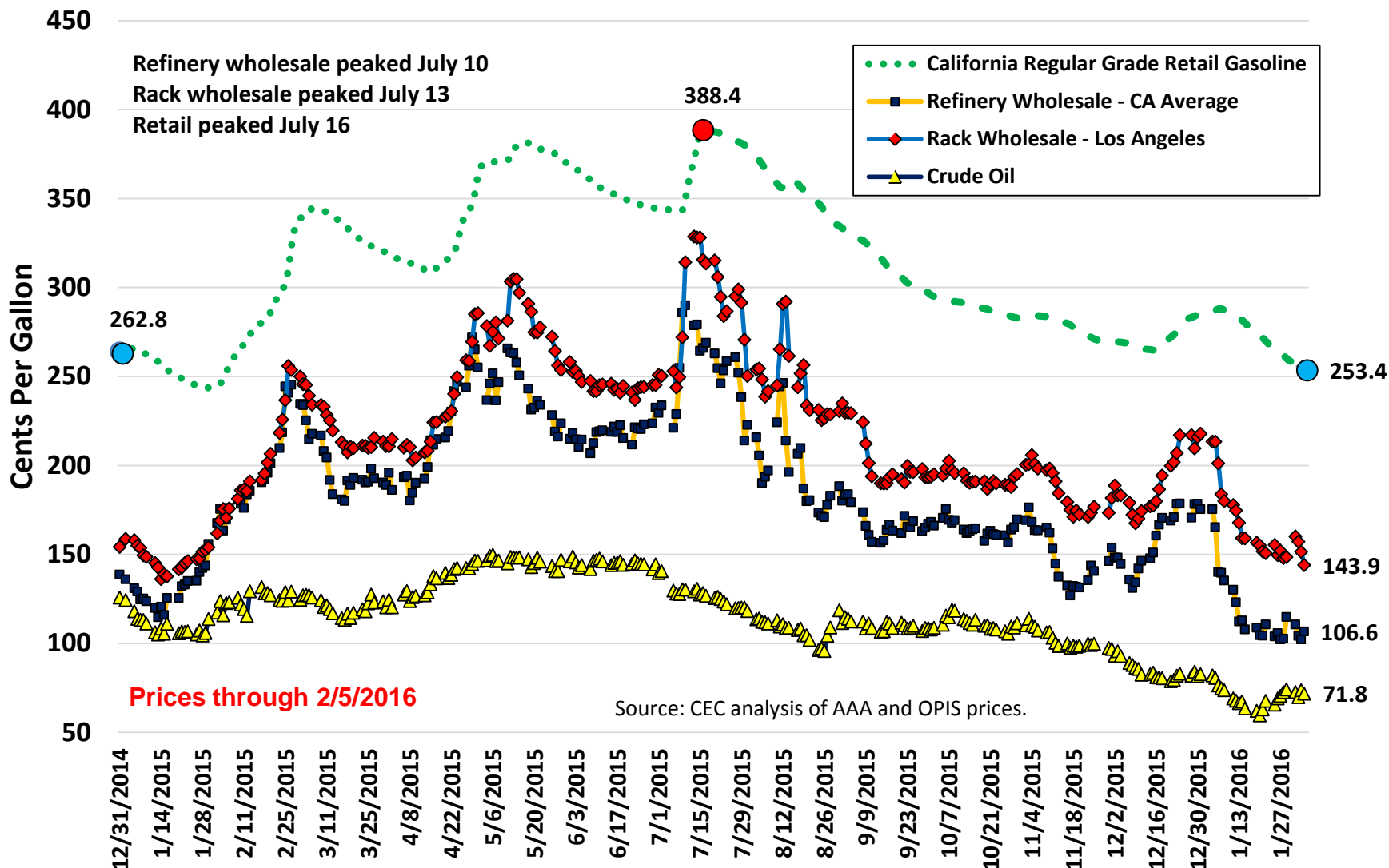
# Retail Gasoline Price Differences

## Calif. Less U.S. Reformulated Average



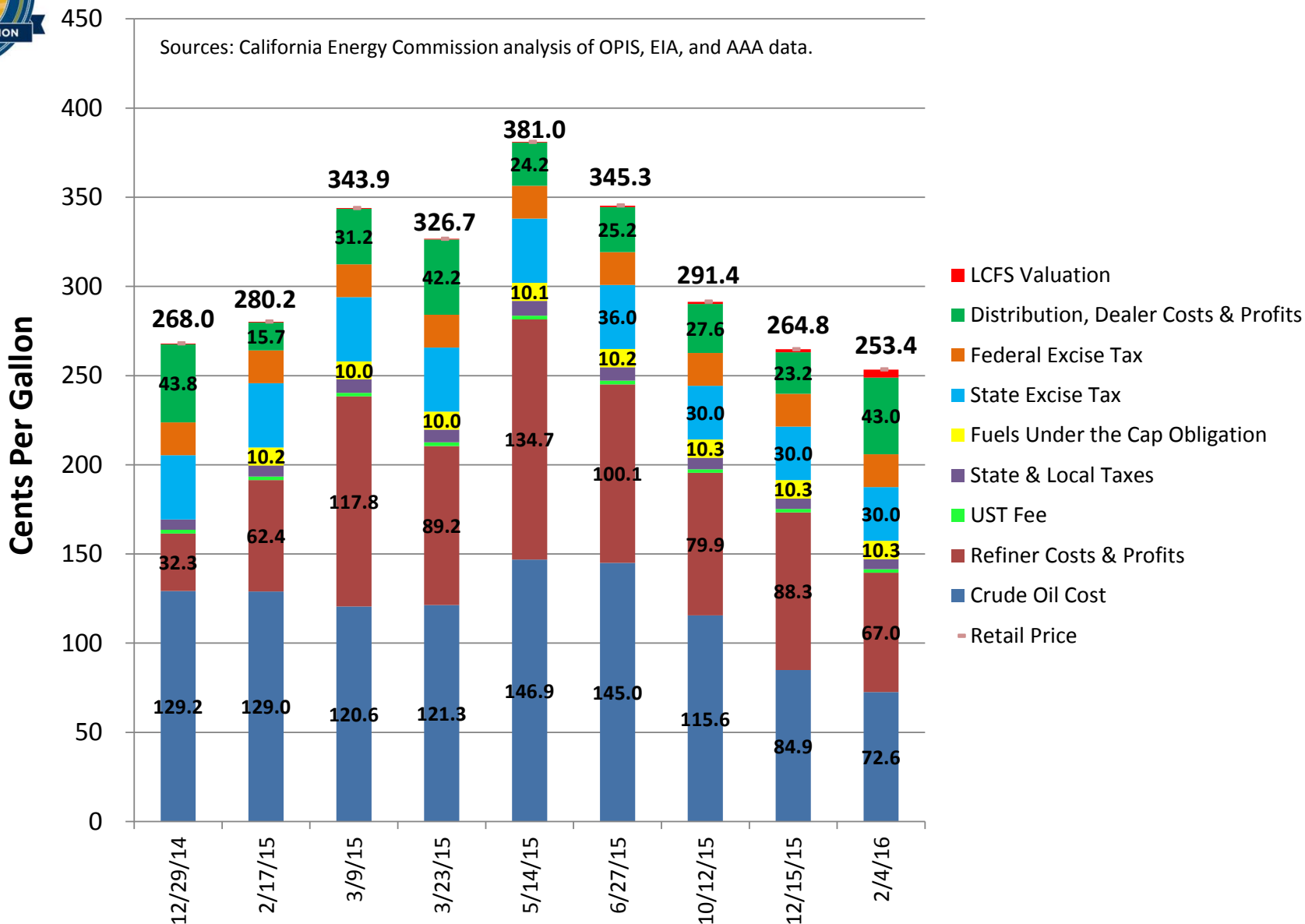


# California Gasoline Price Changes Retail, Rack and Refinery Wholesale





# California Retail Gasoline Components





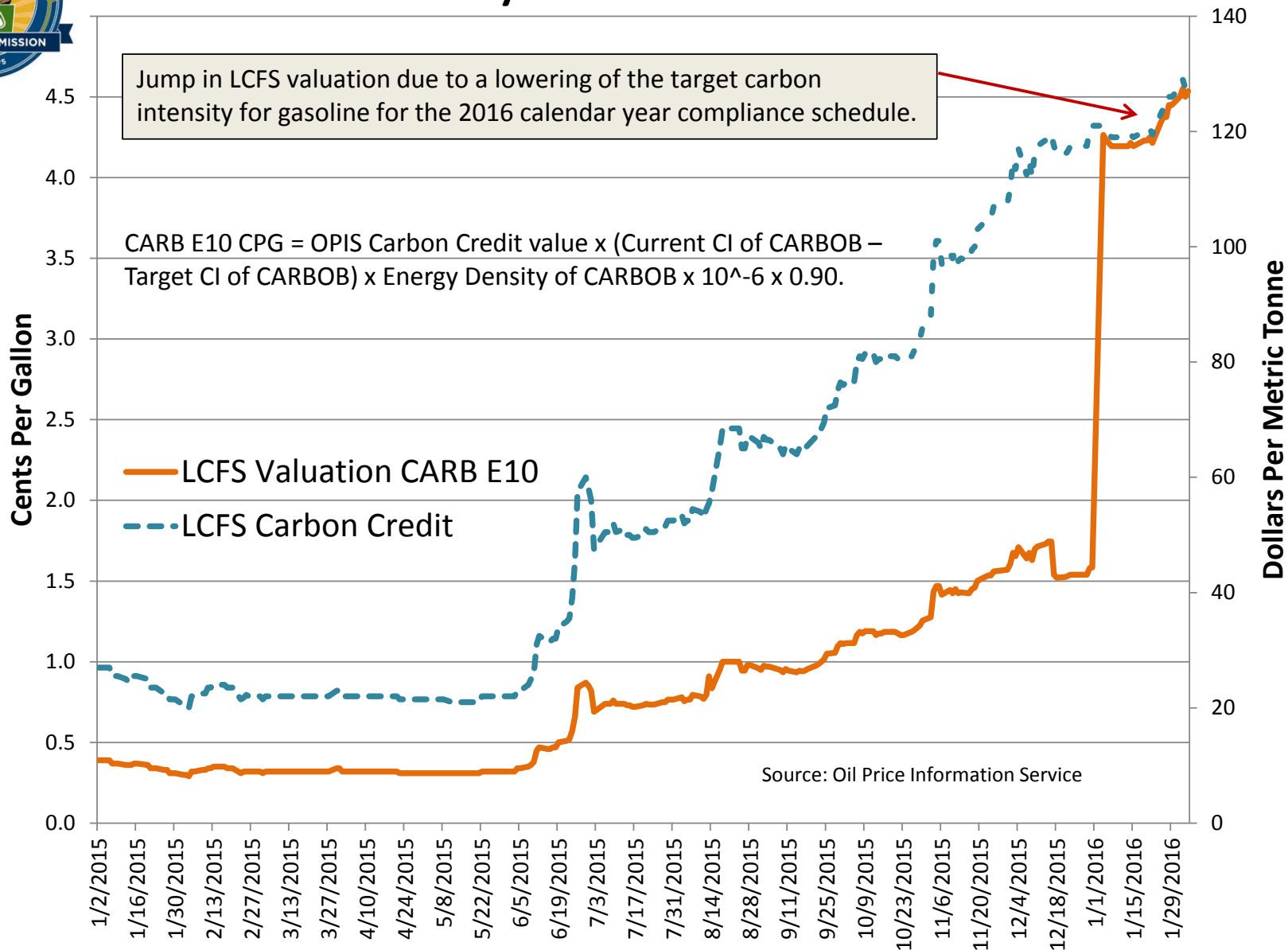
# LCFS Costs Included As New Component

- Low Carbon Fuels Standard (LCFS) valuation has increased
  - Size of valuation was less than one cent per gallon during most of 2015
  - Averaged about 0.8 cents per gallon (cpg) during 2015
- 2016 compliance period for regulation requires further carbon intensity reduction or lower carbon intensity targets for gasoline
- Coupled with higher carbon credit costs, the LCFS valuation is greater than 2015
  - 2016 Y-T-D valuation has averaged **4.3 cpg** (through 2/4/16)
  - According to OPIS, the valuation is either included in the wholesale price posted at the distribution terminal or listed as a line-item fee
  - OPIS publishes these valuations each business day for gasoline and diesel fuel
  - Energy Commission is using the valuation calculated by OPIS for California gasoline containing ethanol at 10 percent by volume





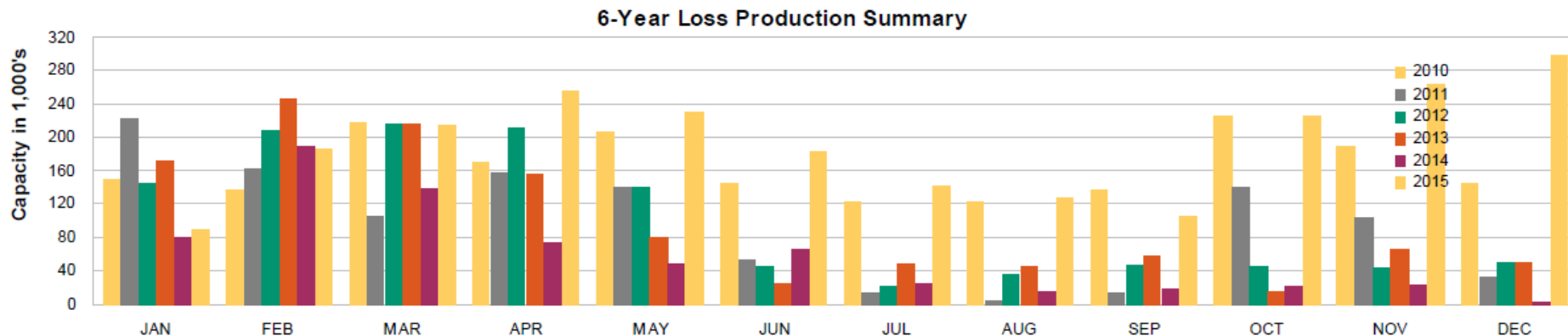
# LCFS Daily Valuation – CARB E10





# Refinery Operations

- Refinery problems – gasoline impact quantified
  - West Coast gasoline production capability significantly degraded
  - Based on analysis of IIR data, the quantity of gasoline production capacity off-line during April – December averaged nearly 170 thousand barrels per day (TBD) **greater** than the same period in 2014
    - October – 205 TBD more, November 240 TBD, and December 295 TBD more than previous year

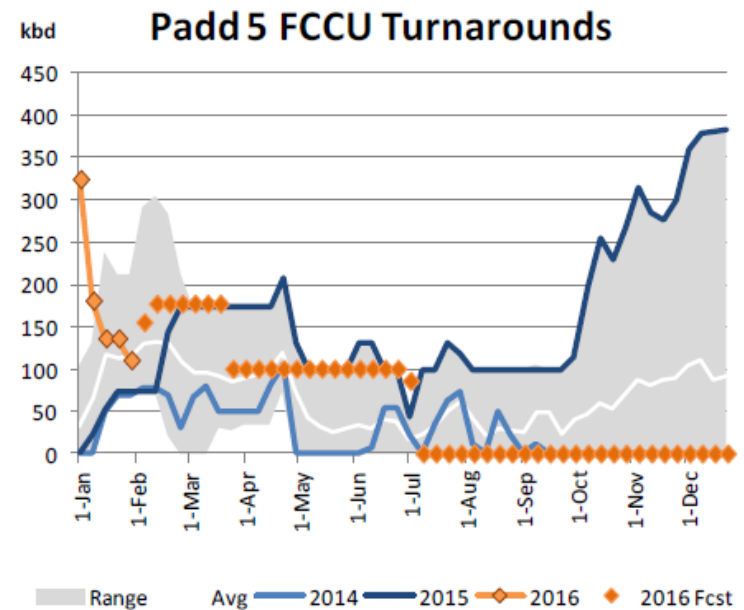
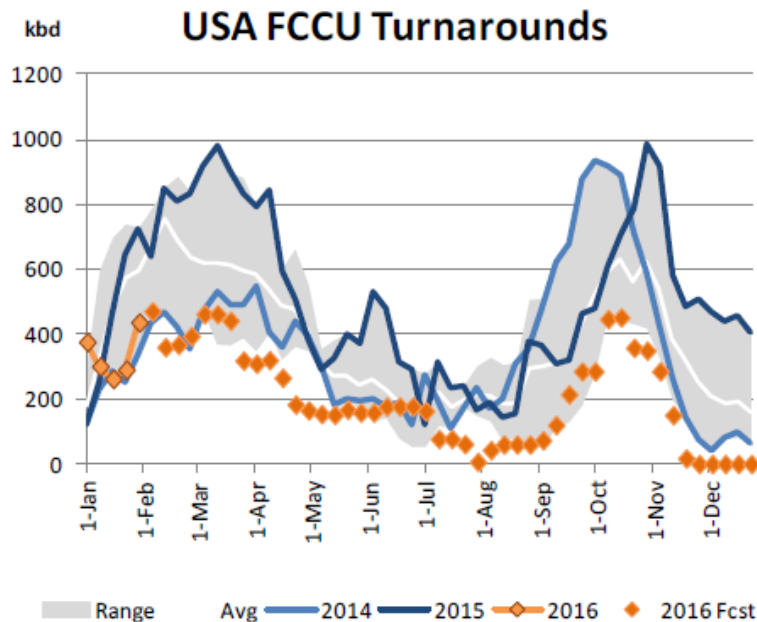


Source: Industrial Information Resources (IIR) Loss Gasoline Production Report.



# Refinery Operations – Look Ahead

- Other refinery issues:
  - ExxonMobil – Torrance refinery will not resume operation of gasoline production equipment **until 2Q 2016** – Sale to PBF announced
  - West Coast planned maintenance activity that is primarily related to gasoline is still heavier-than-normal through 1Q 2016

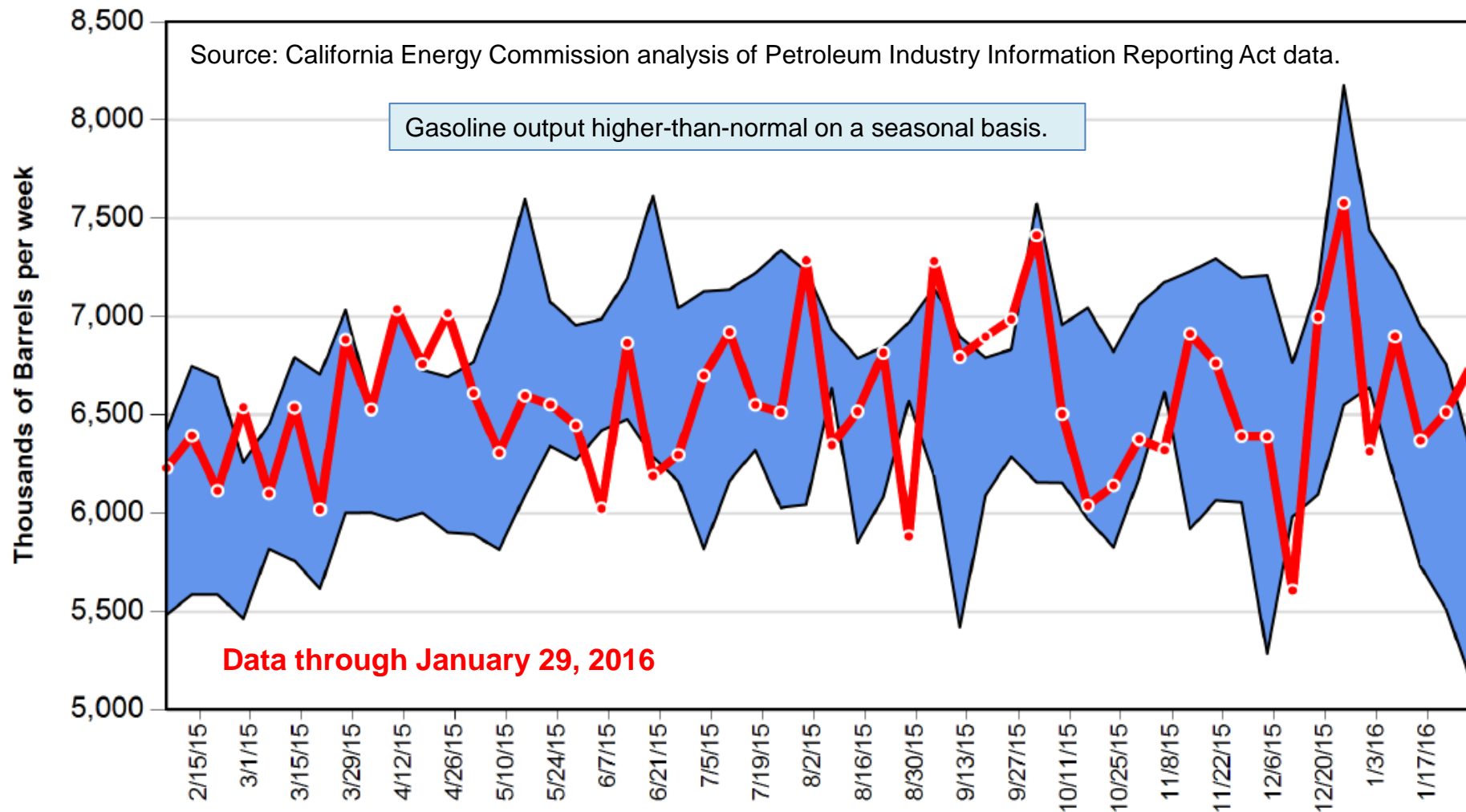


Sources: Industrial Information Resources (IIR) Refinery Off-line Report & DOE Review.



# California Gasoline Production

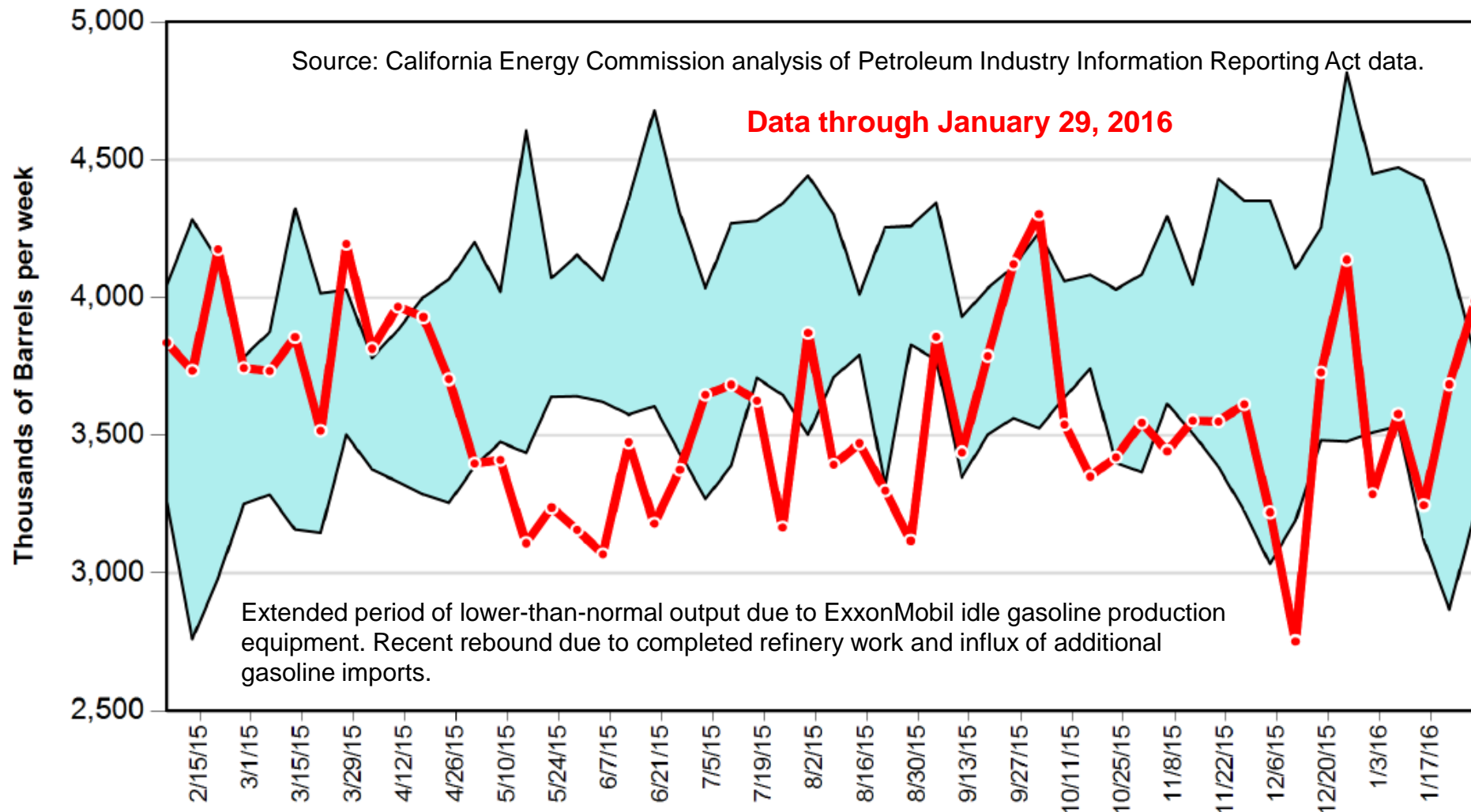
## Current vs. 5-year High-Low Band





# Southern Calif. Gasoline Production

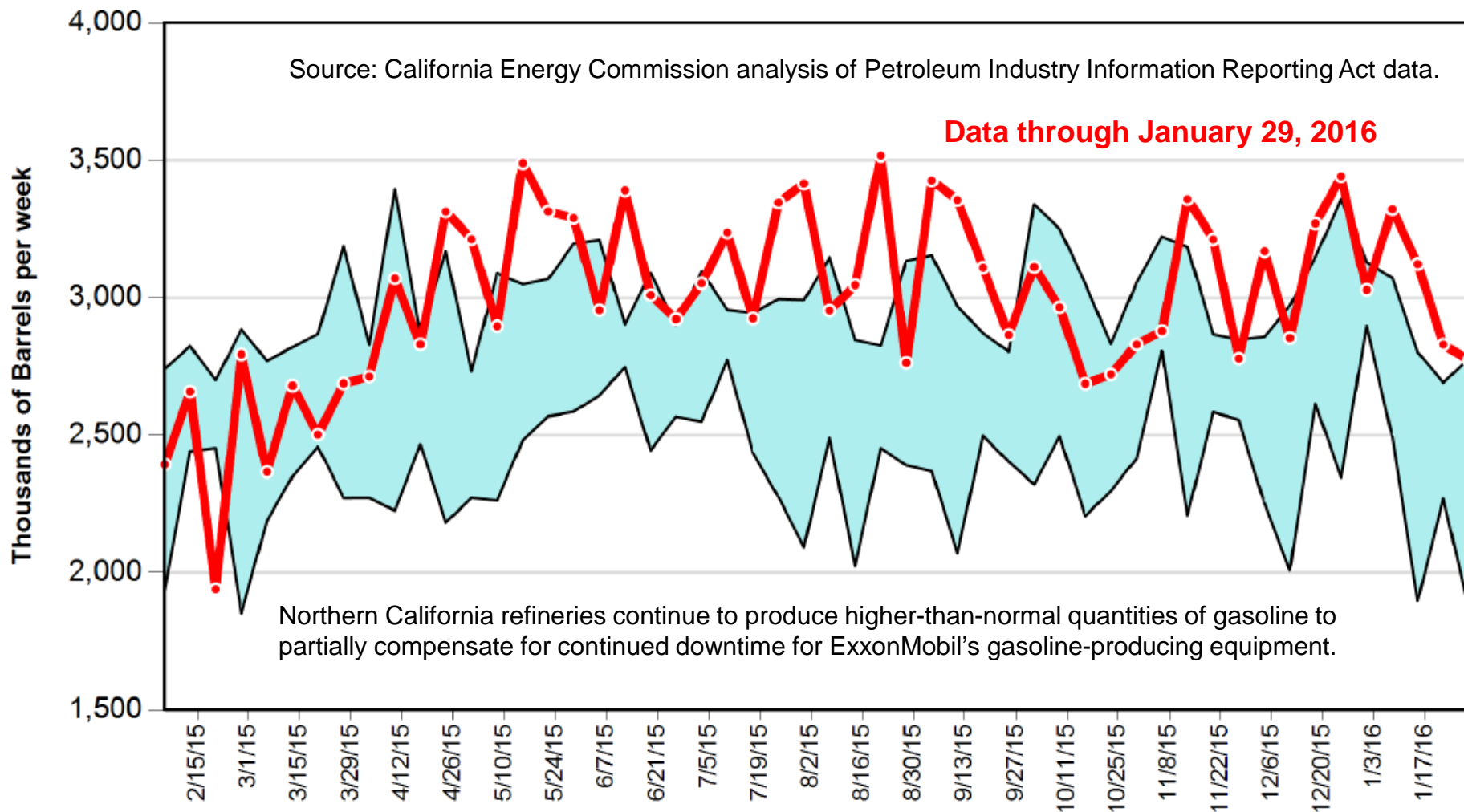
## Current vs. 5-year High-Low Band





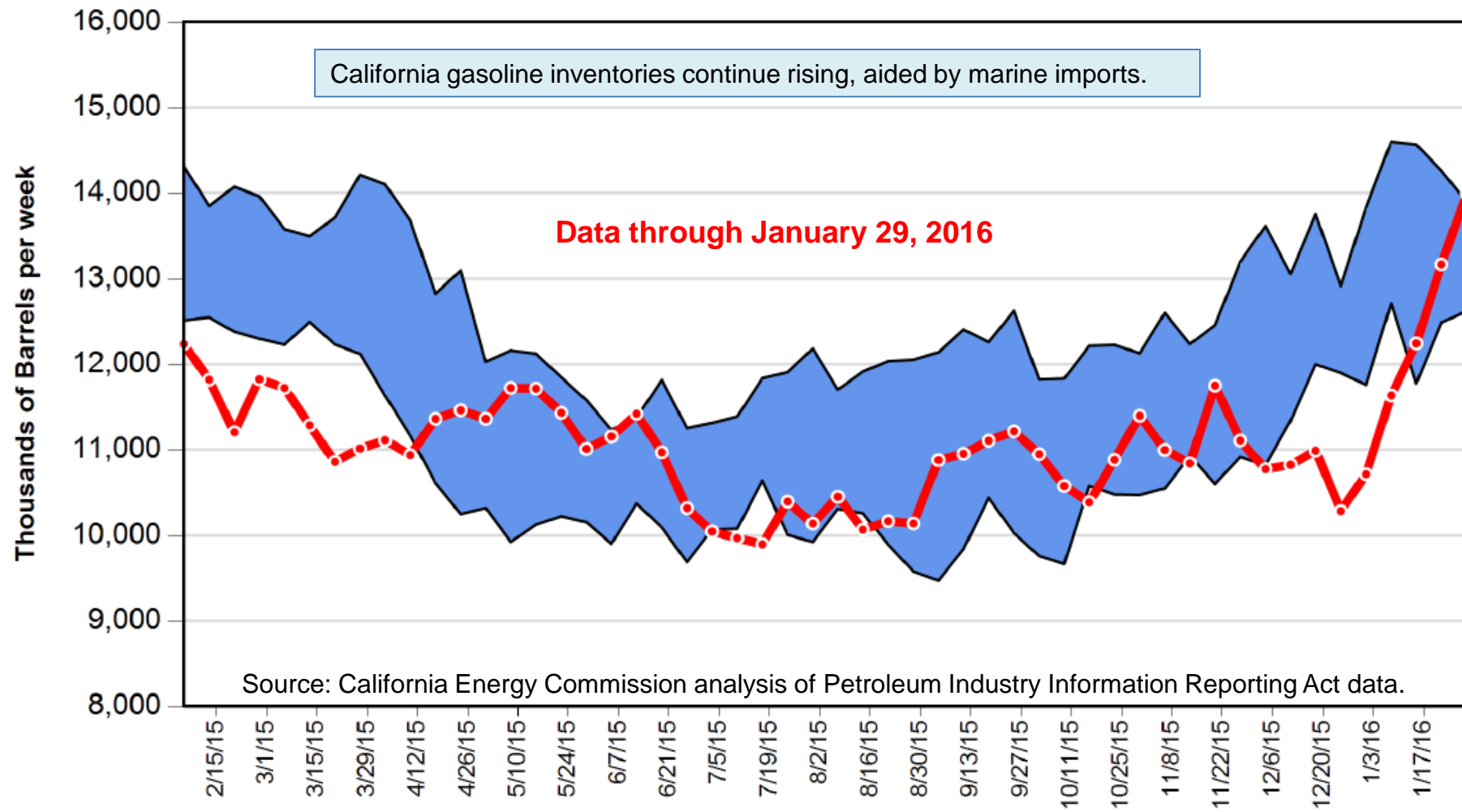
# Northern Calif. Gasoline Production

## Current vs. 5-year High-Low Band





# California Gasoline Inventory Levels Current vs. 5-year High-Low Band

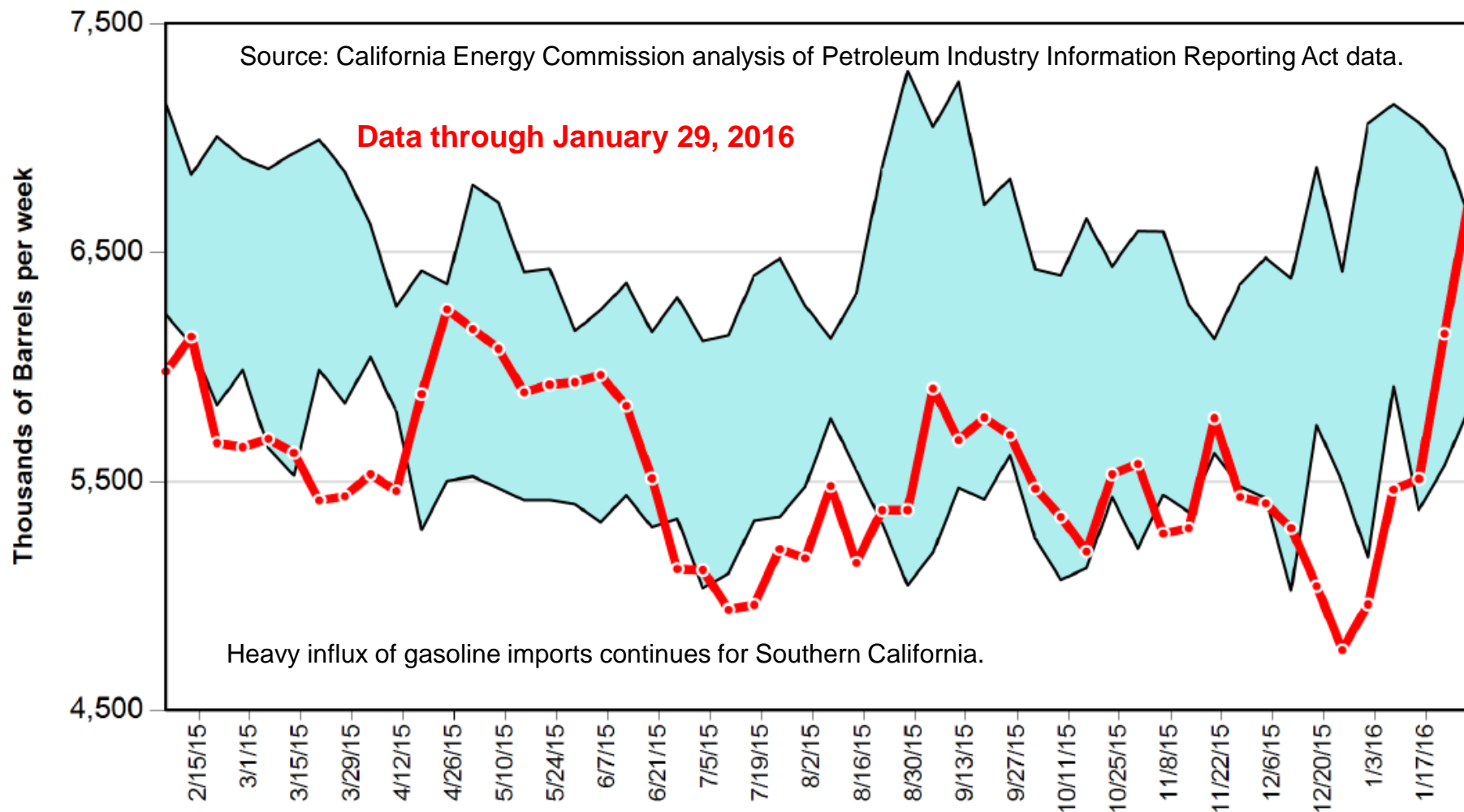






# Southern Calif. Gasoline Inventory

## Current vs. 5-year High-Low Band

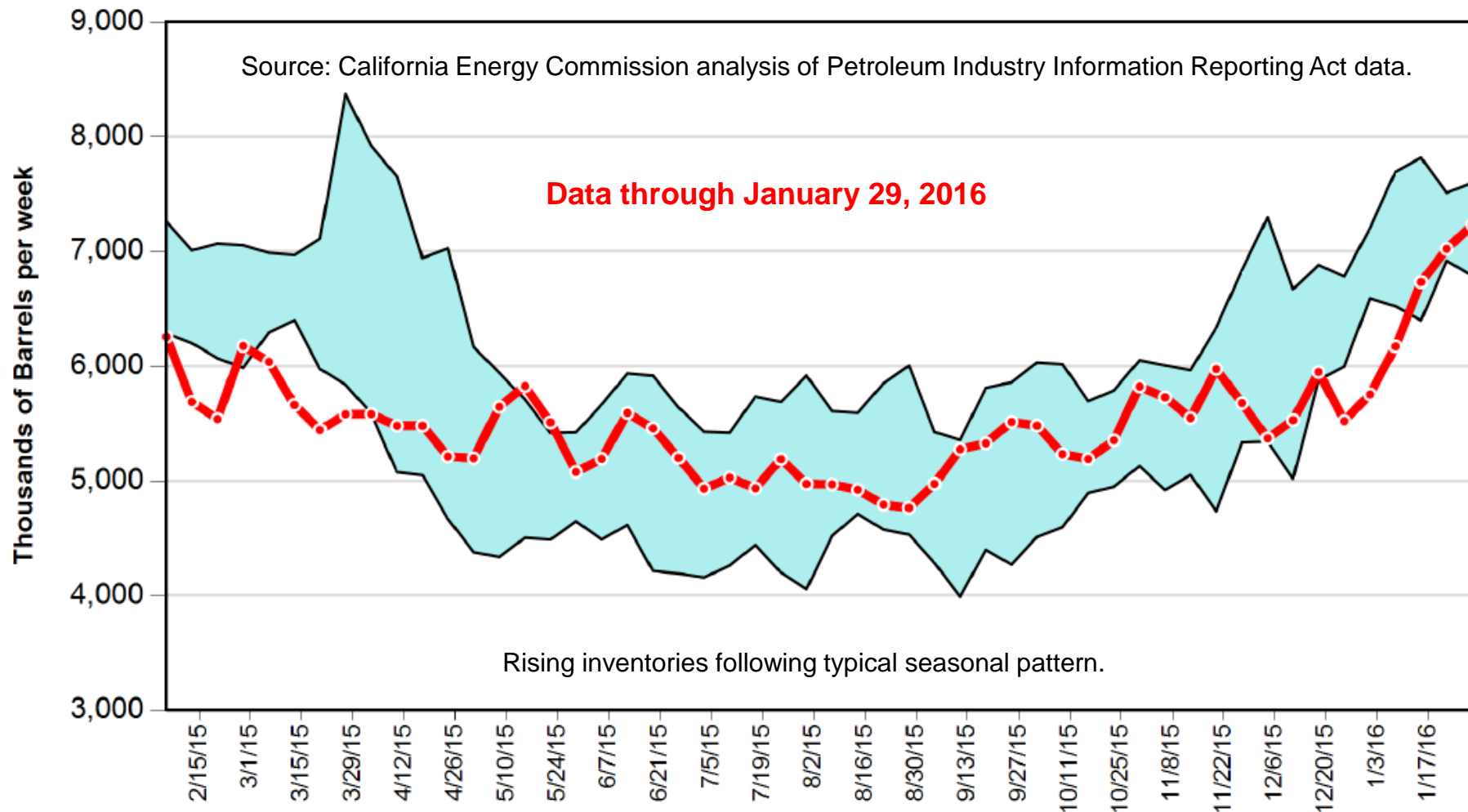






# Northern Calif. Gasoline Inventory

## Current vs. 5-year High-Low Band





# West Coast Foreign Gasoline Imports

Source: California Energy Commission analysis of weekly import data from the Energy Information Administration.

3/27/15-1/1/16 averaged **60.7** thous. bbls per day (TBD)

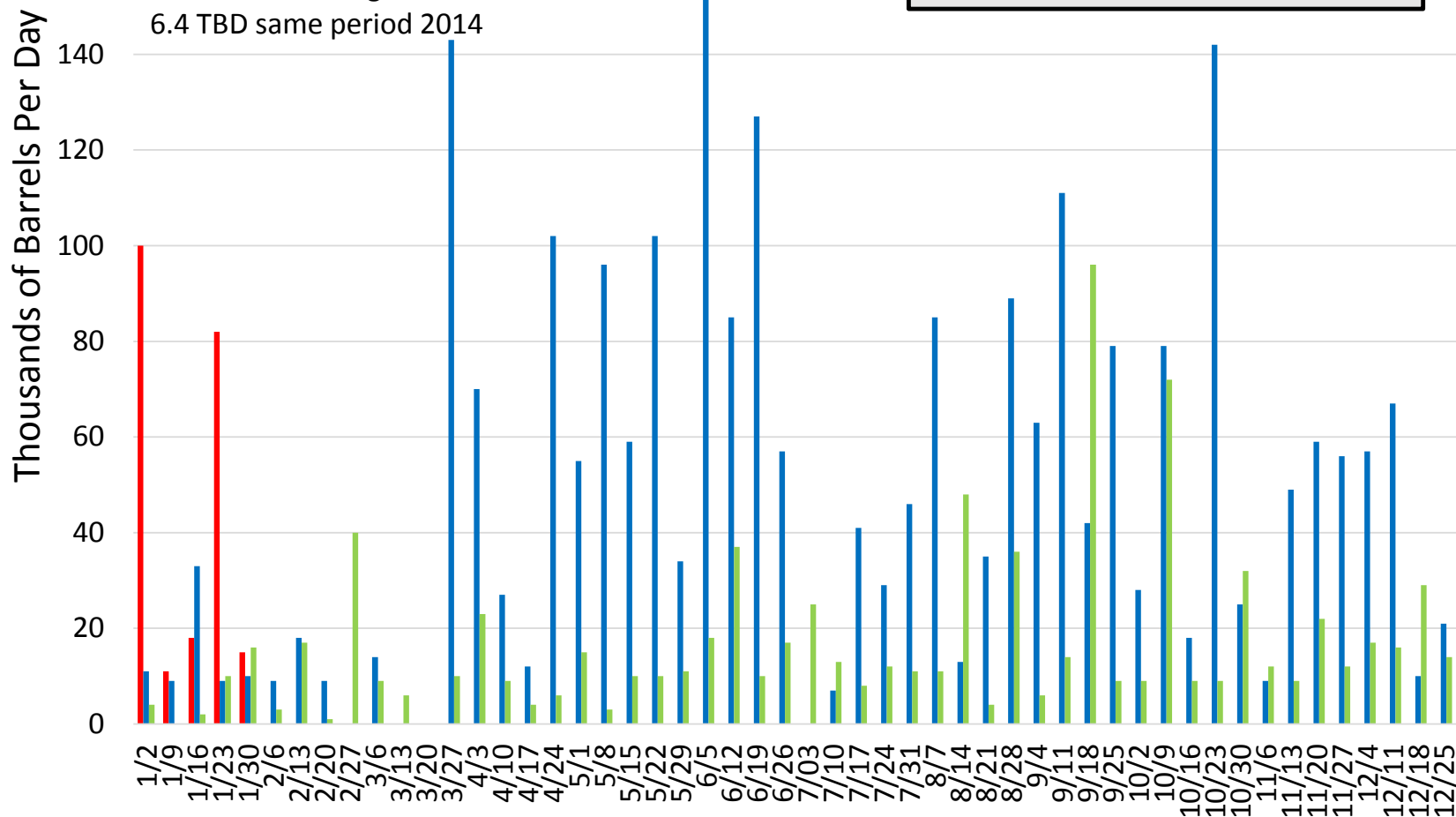
18.3 TBD same period during 2014

**Highest quantity since 2007**

Y-T-D 2016 averaged 45 TBD,

6.4 TBD same period 2014

■ 2016 Total Gasoline Imports  
■ 2015 Total Gasoline Imports  
■ 2014 Total Gasoline Imports





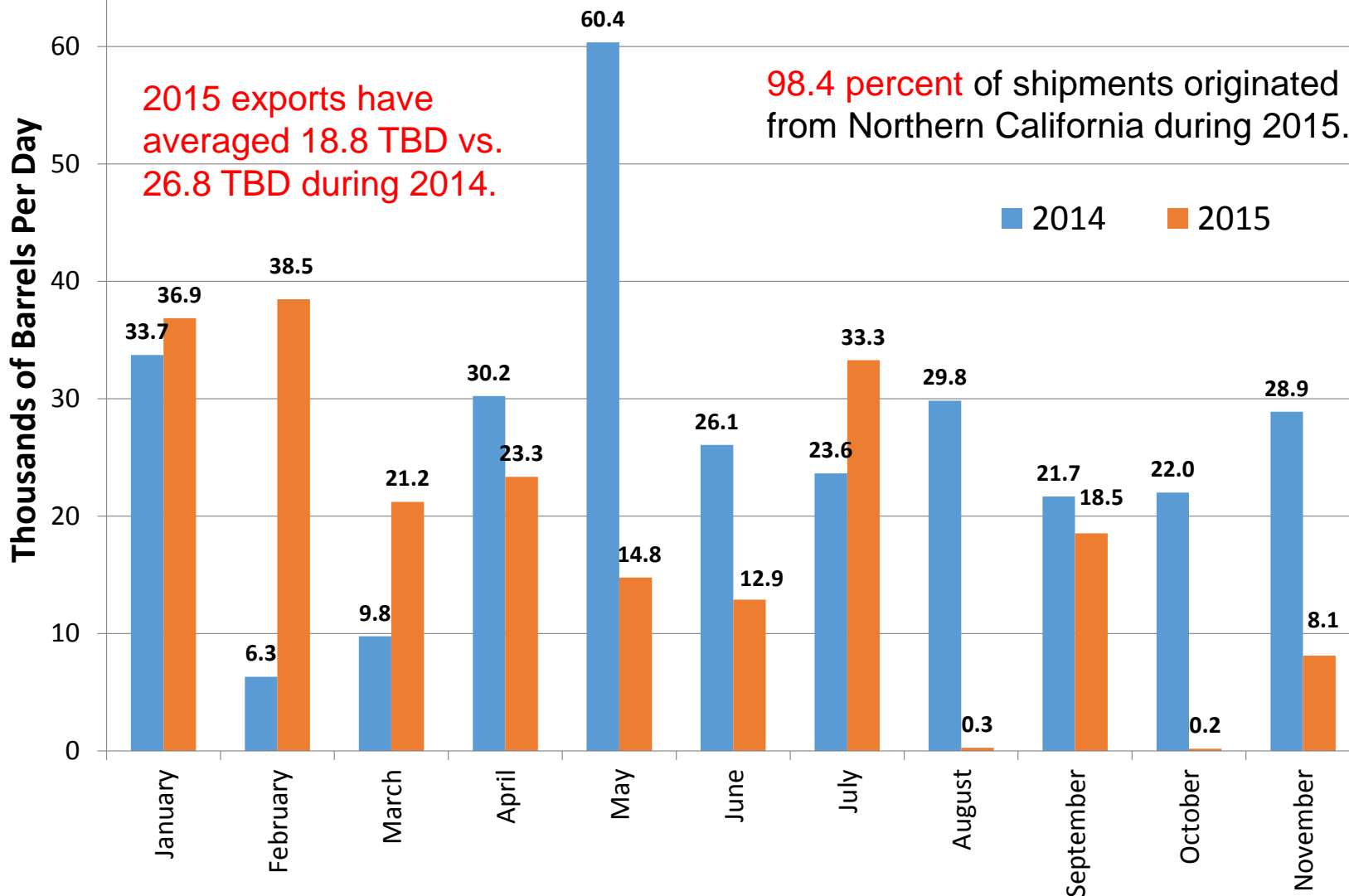
# Marine Imports of Gasoline Continue

- Not all reported gasoline cargoes end up being discharged in California
  - During 2015
    - **Histria Perla** departed anchorage outside Port of Los Angeles on 6/16/15 without off-loading - ended up discharging cargo in Mazatlan, Mexico.
    - **SR American Progress** departed inner harbor anchorage Port of Long Beach on 9/22/15 without off-loading - ended up discharging cargo in Port Everglades, Florida.
  - During 2016
    - **Orion** departed Port of Long Beach on 1/18/16 without off-loading - diverted to Lazaro Cardenas & Manzanillo, Mexico, so far.
- Majority of reported gasoline cargoes were successfully discharged in Southern California.
  - At least 39 cargoes between May and December 2015
  - At least 8 cargoes so far since 12/30/15, 3 more pending



# California Foreign Gasoline Exports

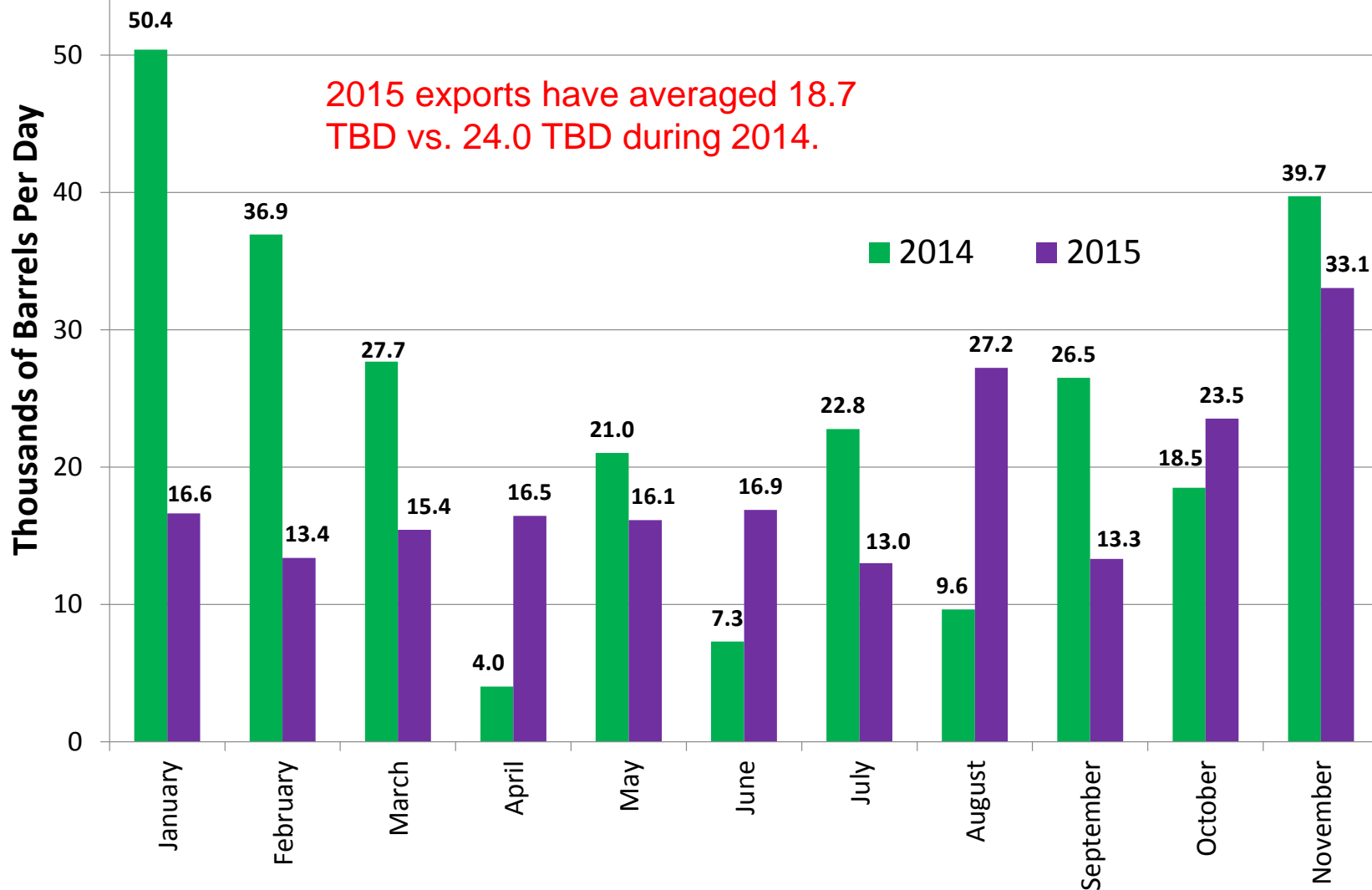
Source: California Energy Commission analysis of the International Trade Commission's Interactive Tariff and Trade DataWeb.





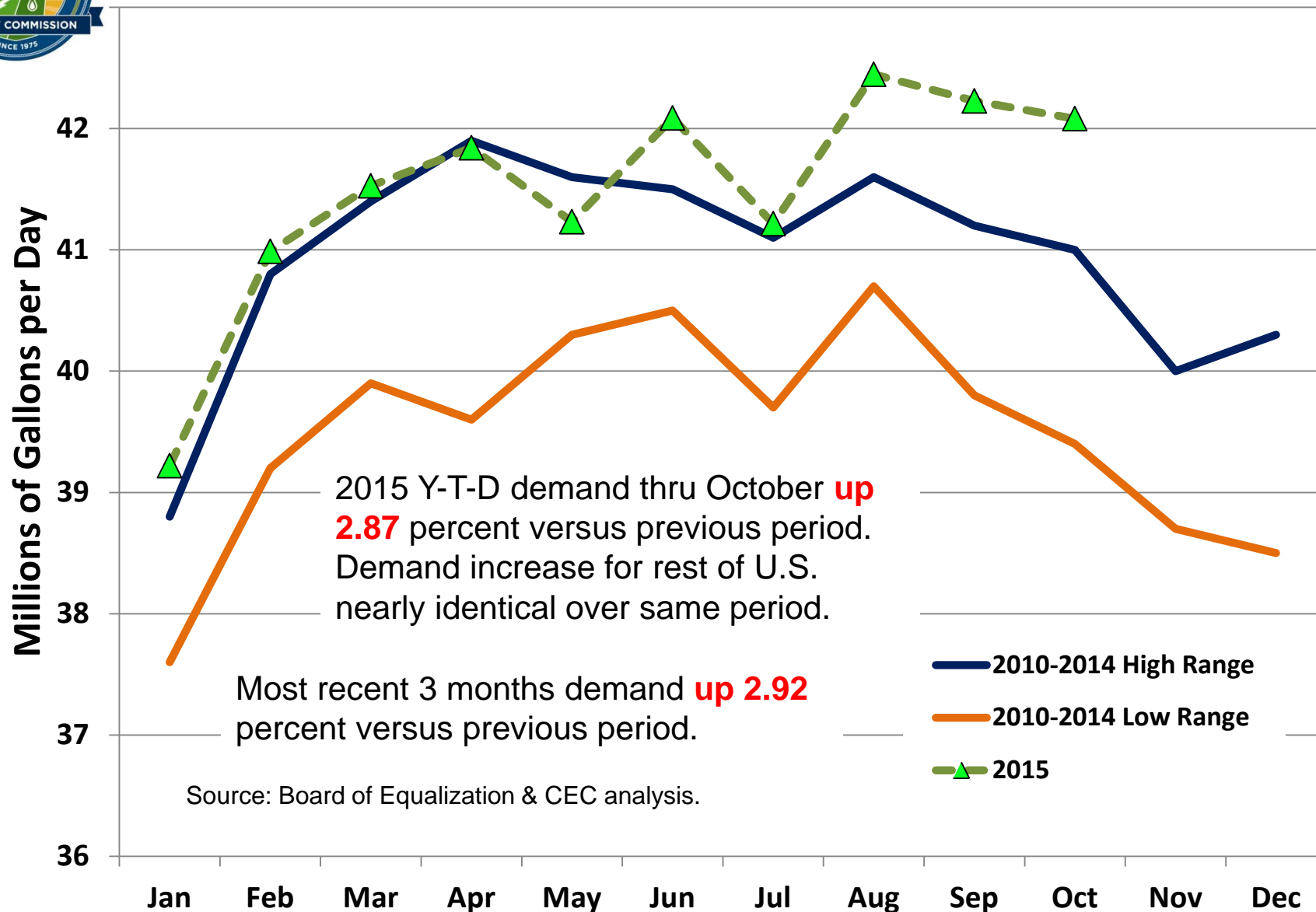
# Pacific Northwest Foreign Gasoline Exports

Source: California Energy Commission analysis of the International Trade Commission's Interactive Tariff and Trade DataWeb.



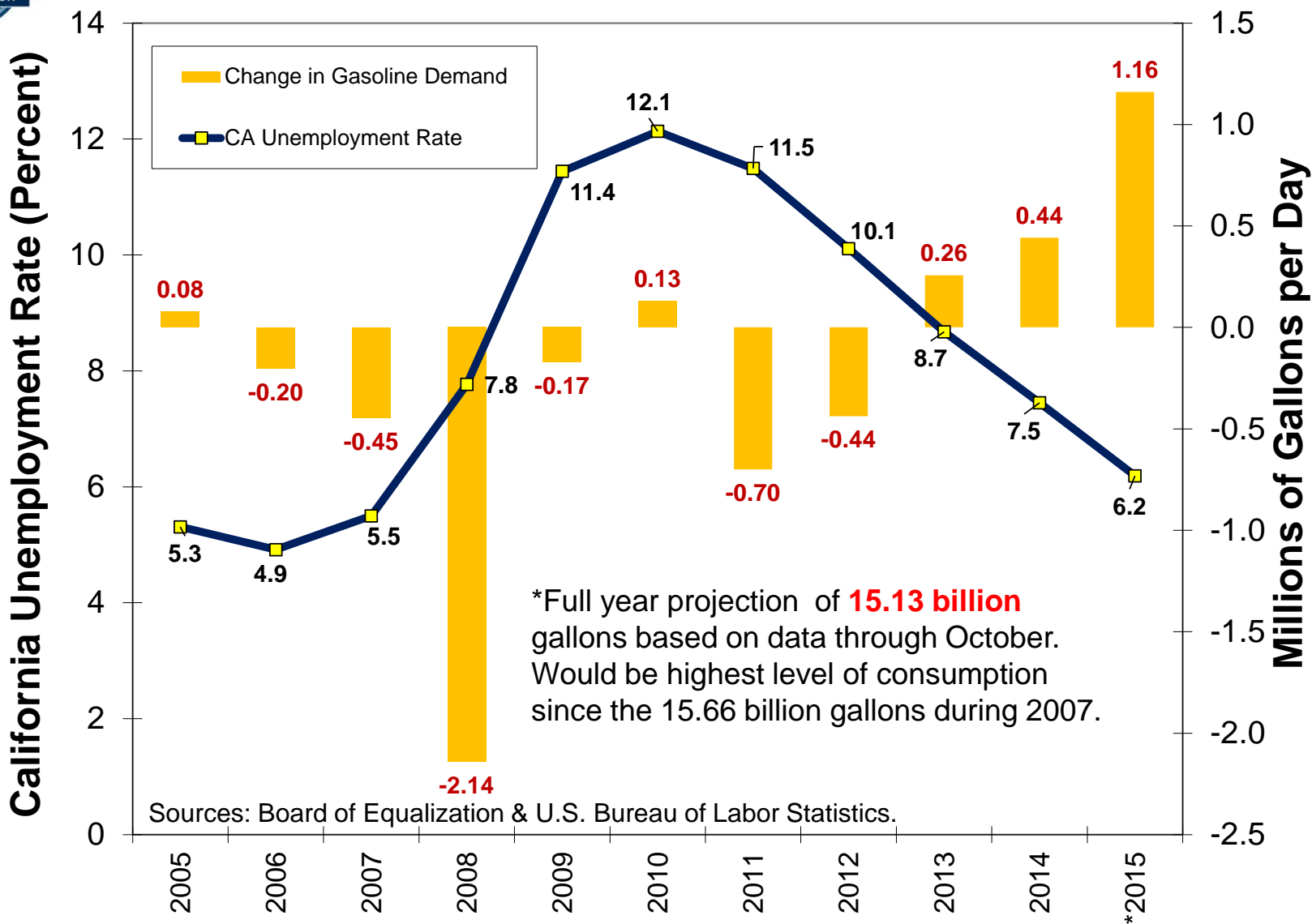


# Calif. Mogas Demand 2015 vs. Seasonal Range





# Gasoline Demand Change & Unemployment





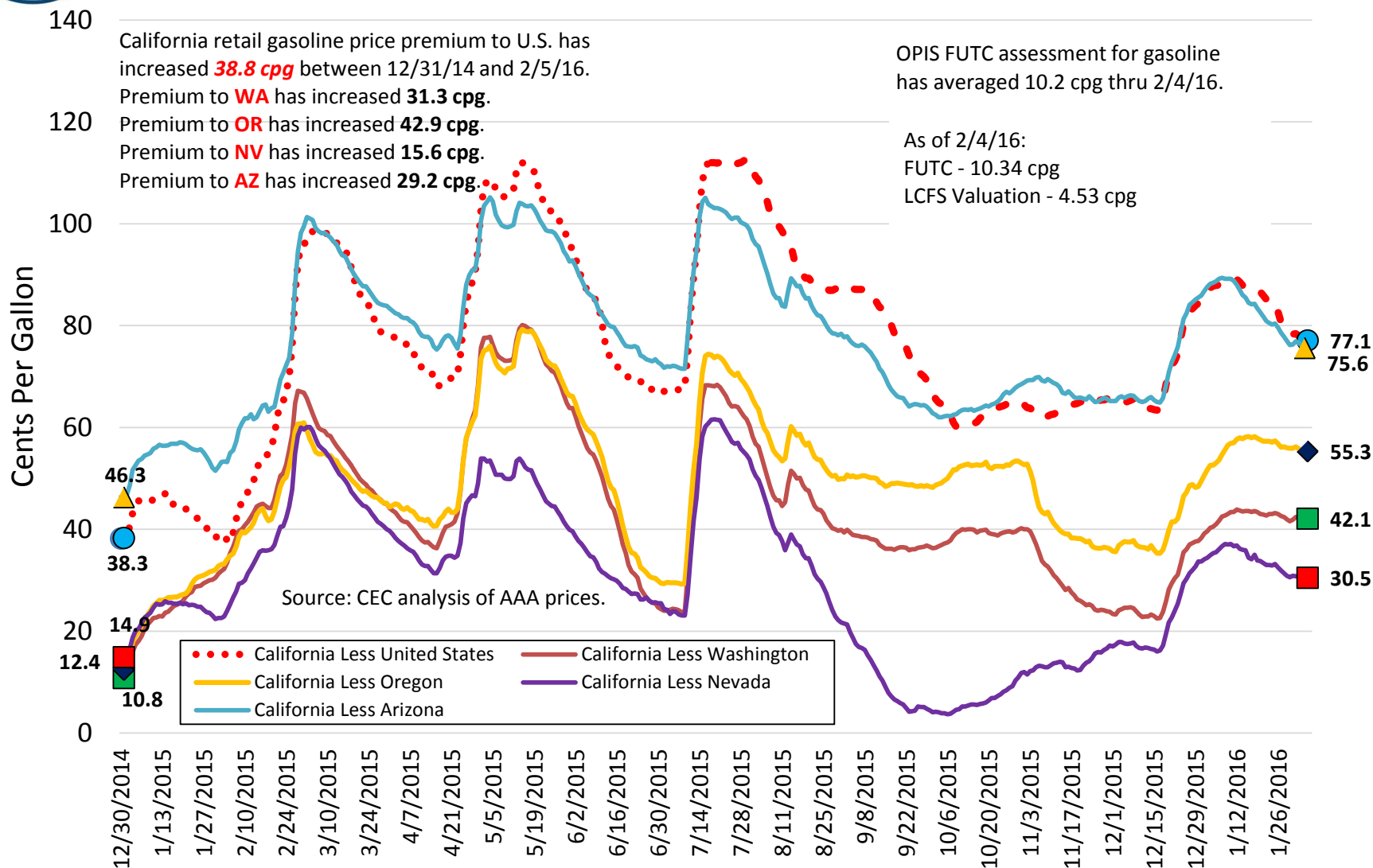
# Fuels-Under-the-Cap (FUTC) Tracking

- Fuels-Under-the-Cap regulation went into effect January 1, 2015
- The Oil Price Information Service (OPIS) calculates a value for the FUTC obligation each business day, California Cap-at-the-Rack (CAR)
- Assessment valuation uses price of carbon x carbon intensity of the transportation fuel
  - Winter CARB reformulated gasoline with 10 percent ethanol
  - Summer CARB reformulated gasoline with 10 percent ethanol
  - CARB diesel fuel
- Majority of fuel providers have elected to use the daily OPIS CAR calculation for inclusion in their bills of lading at the distribution terminal
  - Either as a line item or embedded in the price
- Some marketers are calculating their own FUTC assessment and including in the overall price of the fuel



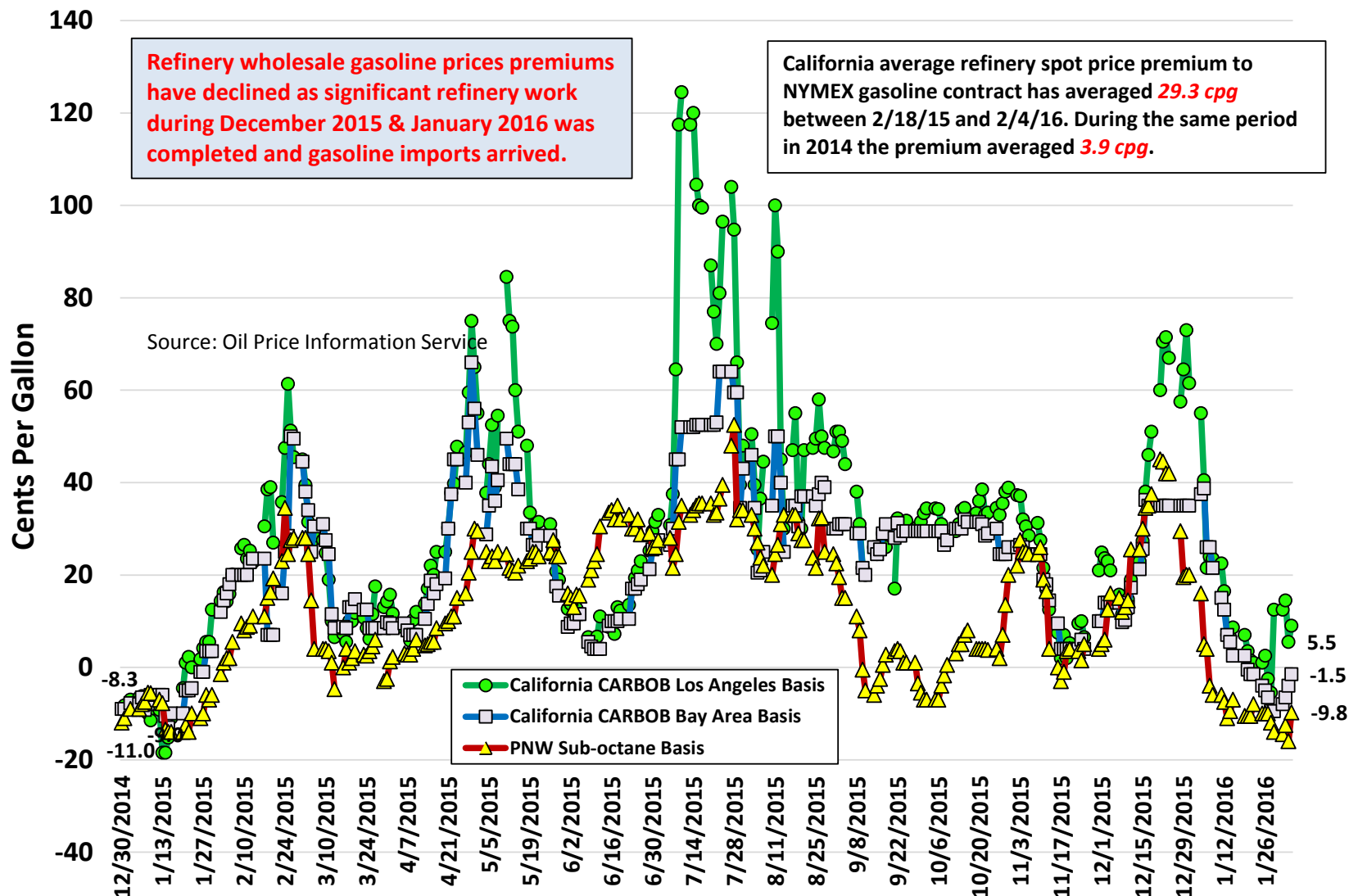


# Retail **Gasoline** Price Differences California vs. United States and Selected States





# Gasoline Refinery Spot Price Basis California vs. Pacific Northwest





# Retail Diesel Fuel Price Differences

## California vs. United States and Selected States

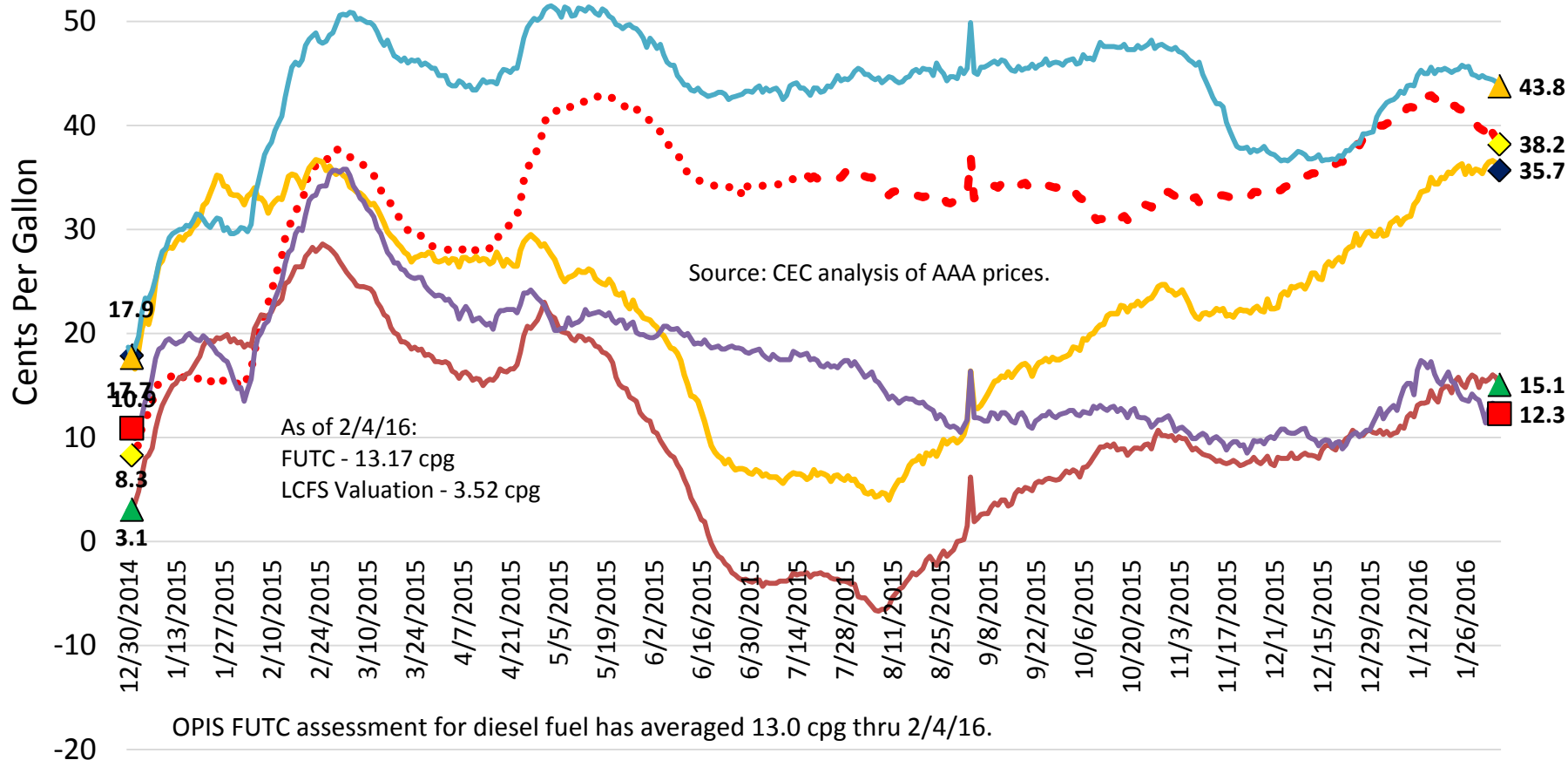
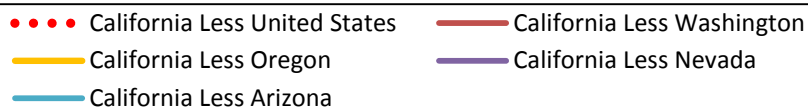
California retail diesel fuel price premium to U.S. has increased **29.9 cpg** between 12/31/14 and 2/5/16.

Premium to **WA** has increased **12.0 cpg**.

Premium to **OR** has increased **17.8 cpg**.

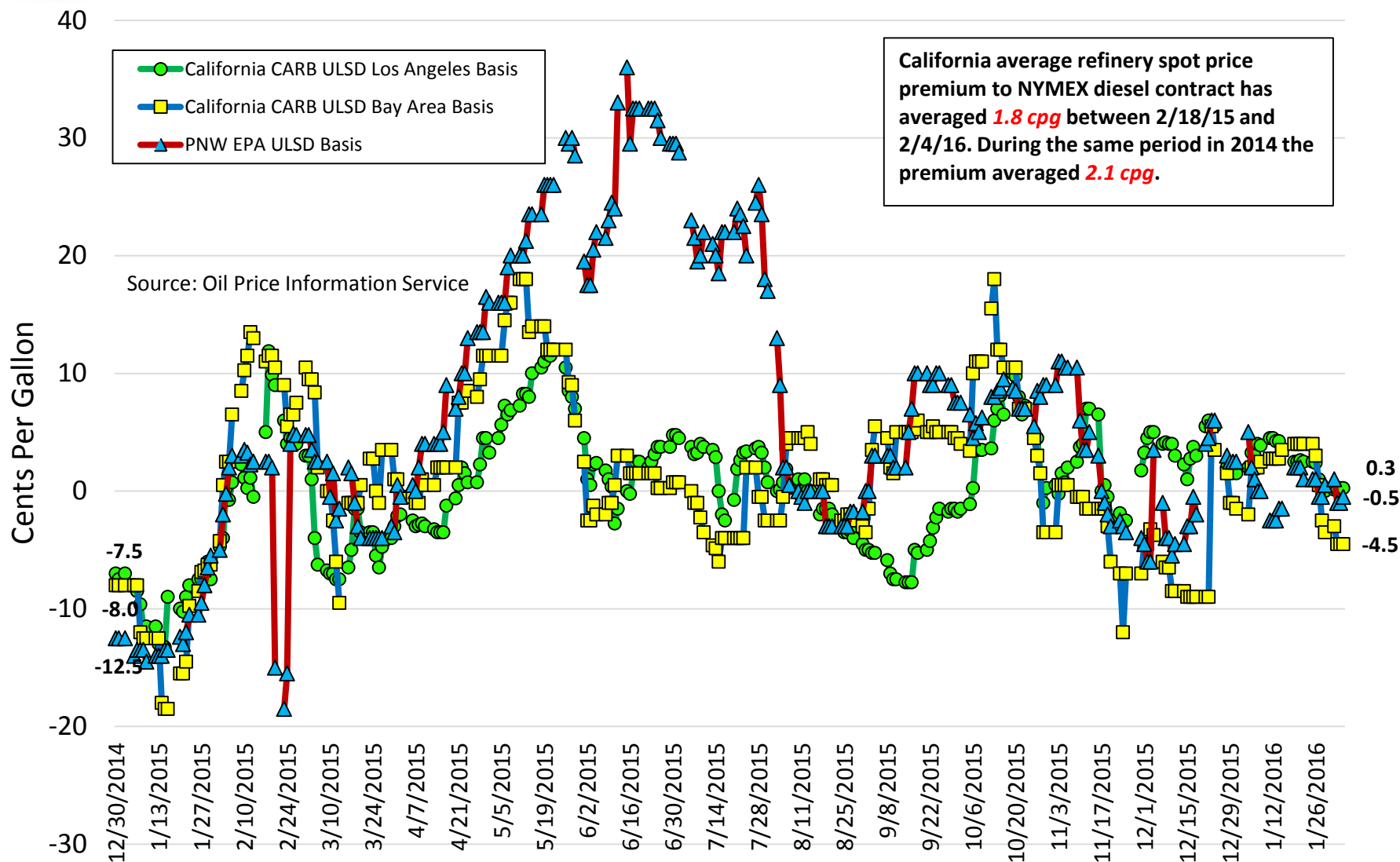
Premium to **NV** has increased **1.4 cpg**.

Premium to **AZ** has increased **26.1 cpg**.





# Diesel Fuel Refinery Spot Price Basis California vs. Pacific Northwest





# Retail Fuel Price Tracking Observations

- Gasoline

- From December 31, 2014 to February 5, 2016 the gap between the California retail gasoline price and other Western states has ranged between **an increase of 15.6 to 42.9 cents per gallon**
- The calculated FUTC assessment by OPIS has averaged 10.2 cents per gallon over the same period and lies below the range of retail price differential change
- Even greater differentials are attributed to increased tightness in the California gasoline market caused by refinery issues - crude oil prices have also rebounded and stabilized but are not a contributing factor to the retail price differential

- Diesel Fuel

- From December 31, 2014 to February 5, 2016 the gap between the California retail diesel fuel price and other Western states has ranged between **an increase of 1.4 to 26.1 cents per gallon**
- The calculated FUTC assessment by OPIS has averaged 13.0 cents per gallon over the same period and lies within the range of retail price differential change





# Additional Questions?



Source: Huffington Post